

**EXHIBIT B
ATTACHED TO
DECLARATION UNDER 37 CFR § 1.131
U.S. PATENT SERIAL NO. 09/614,631**

MICROBIOLOGICAL SERVICES REPORT

**Food Contact Surface Sanitizing Efficacy of Falcon 15 AE, Falcon 15 O and KX-6049
Against *Staphylococcus aureus* ATCC 6538, *Escherichia coli* ATCC 11229 and
Saccharomyces cerevisiae ATCC 834 at 25°C**

M.S.R. #

EX

SUBMITTED BY

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DATE SUBMITTED**REPORTED BY****COMPLETION DATE**

OBJECTIVE:

The objective of the analysis was to determine the food contact surface sanitizing efficacy of Falcon 15 AE, Falcon 15 O and KX-6049 against *Staphylococcus aureus* ATCC 6538, *Escherichia coli* ATCC 11229 and *Saccharomyces cerevisiae* ATCC 834 at 25°C and 25 ppm POAA.

TEST METHOD:

Ecolab Microbiological Services SOP

, *Germicidal and Detergent Sanitizing Action of Disinfectants - Final Action*

METHOD PARAMETERS:

Test Substances:

1. Falcon 15 AE
2. Falcon 15 O
3. KX-6049

Chemical Properties of Each Test Formula

Formula	ppm POAA	ppm H ₂ O ₂	ppm AA	ppm POOA	ppm OA
Falcon 15 AE	25	10	130	4	19
Falcon 15 O	25	10	109	6	23
KX-6049	25	50	231	3	31

Test Substance Name	Diluent	Concentration ppm (v/v)	mL of Test Substance	mL of Diluent	Pre-test pH
Falcon 15 AE	Sterile Distilled Water	257 ppm	0.26	999.74	3.73
Falcon 15 O	Sterile Distilled Water	241 ppm	0.24	999.76	3.78
KX-6049	Sterile Distilled Water	824 ppm	0.82	999.18	3.54

Test Systems:

Staphylococcus aureus ATCC 6538
Escherichia coli ATCC 11229
Saccharomyces cerevisiae ATCC 834

Test Temperature: 25°C

Exposure Times:

10 seconds
 20 seconds
 30 seconds

Neutralizer: 1.0% Sodium thiosulfate

Subculture Media: Tryptone Glucose Extract (TGE) Agar for *S. aureus* & *E. coli*
 Sabouraud Dextrose (SAB) Agar for *S. cerevisiae*

Incubation: 37°C for 48 hours (*S. aureus* & *E. coli*)
 26°C for 72 hours (*S. cerevisiae*)

RESULTS:

Test Date:

Date Results Read:

Inoculum Numbers (CFU/mL)

Organism	A	B	C	Average
<i>S. aureus</i>	29×10^6	45×10^6	46×10^6	4.0×10^7
<i>E. coli</i>	99×10^6	104×10^6	87×10^6	9.7×10^7
<i>S. cerevisiae</i>	15×10^5	21×10^5	12×10^5	1.6×10^6

***Staphylococcus aureus* ATCC 6538**

Test Substance	Exposure Time (seconds)	Survivors (CFU/mL)	Average Survivors (CFU/mL)	Log Reduction	Post-test pH
Falcon 15 AE	10	$10, 5 \times 10^1$	7.5×10^1	5.73	3.78
	20	<10, <10	$<1.0 \times 10^1$	>6.60	
	30	<10, <10	$<1.0 \times 10^1$	>6.60	
Falcon 15 O	10	<10, <10	$<1.0 \times 10^1$	>6.60	3.84
	20	<10, <10	$<1.0 \times 10^1$	>6.60	
	30	<10, <10	$<1.0 \times 10^1$	>6.60	
KX-6049	10	$10, 15 \times 10^1$	1.3×10^2	5.49	3.59
	20	<10, <10	$<1.0 \times 10^1$	>6.60	
	30	<10, <10	$<1.0 \times 10^1$	>6.60	

Escherichia coli ATCC 11229

Test Substance	Exposure Time (seconds)	Survivors (CFU/mL)	Average Survivors (CFU/mL)	Log Reduction	Post-test pH
Falcon 15 AE	10	$13, 24 \times 10^3$	1.9×10^4	3.71	3.79
	20	<10, <10	$<1.0 \times 10^1$	>6.99	
	30	<10, <10	$<1.0 \times 10^1$	>6.99	
Falcon 15 O	10	$65, 38 \times 10^1$	5.2×10^2	5.27	3.85
	20	<10, <10	$<1.0 \times 10^1$	>6.99	
	30	<10, <10	$<1.0 \times 10^1$	>6.99	
KX-6049	10	$3, 1 \times 10^5$	2.0×10^5	2.69	3.59
	20	<10, <10	$<1.0 \times 10^1$	>6.99	
	30	<10, <10	$<1.0 \times 10^1$	>6.99	

Saccharomyces cerevisiae ATCC 834

Test Substance	Exposure Time (seconds)	Survivors (CFU/mL)	Average Survivors (CFU/mL)	Log Reduction	Post-test pH
Falcon 15 AE	10	$3, 1 \times 10^5$	2.0×10^5	0.90	3.81
	20	<10, <10	$<1.0 \times 10^1$	>5.20	
	30	<10, <10	$<1.0 \times 10^1$	>5.20	
Falcon 15 O	10	$2, 3 \times 10^1$	2.5×10^1	4.81	3.85
	20	<10, <10	$<1.0 \times 10^1$	>5.20	
	30	<10, <10	$<1.0 \times 10^1$	>5.20	
KX-6049	10	$5, 6 \times 10^5$	5.5×10^5	0.46	3.60
	20	$12, 14 \times 10^3$	1.3×10^4	2.09	
	30	<10, <10	$<1.0 \times 10^1$	>5.20	

CONCLUSIONS:

Falcon 15 AE, Falcon 15 O and KX-6049 all achieved a >5.00 log reduction after a 10 second exposure time against *Staphylococcus aureus* ATCC 6538 at 25°C. Falcon 15 O demonstrated the best efficacy against *Escherichia coli* ATCC 11229 by achieving a >5.00 log reduction after a 10 second exposure time, while Falcon 15 AE and KX-6049 achieved a >5.00 log reduction after 20 seconds. Falcon 15 O also demonstrated the best efficacy against *Saccharomyces cerevisiae* ATCC 834 by achieving a 4.81 log reduction after a 10 second exposure time and a >5.00 log reduction after a 20 second exposure time. Falcon 15 AE demonstrated similar efficacy by achieving a >5.00 log reduction after a 20 minute exposure time while achieving a <1.00 log reduction after a 10 second exposure time. KX-6049 achieved a >5.00 log reduction after a 30 second exposure time.

Tested and Certified by: _____

Date